

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,708	01/27/2004	Deborah A. Klinkert	1094.205US1	2573
21186	590 01/12/2006		EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH			EDWARDS, LOREN C	
1600 TCF TOWER 121 SOUTH EIGHT STREET MINNEAPOLIS, MN 55402			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		XY				
	Application No.	Applicant(s)				
	10/765,708	KLINKERT ET AL.				
Office Action Summary	Examiner	Art Unit				
·	Loren C. Edwards	3748				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DOWN THE MAILING DOWN THE MAILING DOWN THE STATE OF THE MAILING DOWN THE STATE OF THE MAILING DOWN THE STATE OF THE MAILING DOWN THE MAILING THE	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE!	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status		·				
1) Responsive to communication(s) filed on	_·					
2a) This action is FINAL . 2b) ⊠ This	ta) This action is FINAL . 2b) ⊠ This action is non-final.					
	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-15</u> is/are rejected.						
7) Claim(s) 16 is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>27 January 2004</u> is/are: a) accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex						
TT) The oath of declaration is objected to by the Ex	danimer. Note the attached Office	Action of form 1 10-102.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a))-(d) or (f).				
1. Certified copies of the priority document	s have been received.					
2. Certified copies of the priority document		on No				
3. Copies of the certified copies of the prior						
application from the International Bureau	·	•				
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
	·					
Attachment(s)						

Paper No(s)/Mail Date 8/16/04.

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

6) Other: __

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application (PTO-152)

Art Unit: 3748

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 8/16/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

Drawings

The drawings are objected to because Figures 1-10 are labeled with hand written 2. letters and characters. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 3748

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 1, and 3-4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Jörg Alexnat et al. (U.S. Pat. No. 6,058,702). Jörg Alexnat discloses a system comprising: a combustion engine having an exhaust to emit water and exhaust gases from the exhaust (Fig. 1, No. 6 and 13); and a sound-dampening device coupled between the exhaust and a muffler, the sound-dampening device including a tubular member having two or more internal rings (Fig. 1, No. 19; Fig. 3, No. 57-58; Col. 7, Lines 20-23).
- 5. In regards to claim 3, Jörg Alexnat discloses the system of claim 1, as described above, and further wherein the tubular member includes a flexible exhaust hose for connecting between the exhaust and a muffler (Fig. 1, No. 16 and 18; Col. 5, Lines 3-12), the flexible exhaust hose having an inner diameter (Fig. 2, No. 33), and the two or more rings are located on the inner diameter of the flexible exhaust hose (Fig. 2, No. 38; Col. 5, Lines 55-58), each ring having an outer diameter the same as the inner diameter

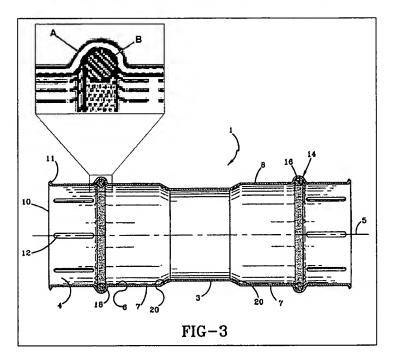
Page 4

of the flexible exhaust hose and an inner diameter smaller than the inner diameter of the flexible exhaust hose (Fig. 2, No. 38).

- 6. In regards to claim 4, Jörg Alexnat discloses the system of claim 1, as described above, and further wherein the tubular member includes an exhaust tube having a first end connectable to the exhaust (Fig. 1, No. 13 and 15), the tube including an inner diameter (Fig. 2, No. 33), the inner diameter having the at least two rings mounted thereto (Fig. 2, No. 38; Col. 5, Lines 55-58), each ring having an outer diameter the same as the inner diameter of the tube and an inner diameter smaller than the inner diameter of the pipe (Fig. 2, No. 38).
- 7. Claims 6 and 8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Davey (U.S. Pat. No. 5,639,127). Davey discloses a flexible exhaust hose for connecting between a combustion engine and a muffler (Abstract), the flexible exhaust hose having an inner diameter, and two or more rings located on the inner diameter of the flexible exhaust hose (Fig. 1, No. 25-26), each ring having an outer diameter the same as the inner diameter of the flexible exhaust hose and an inner diameter smaller than the inner diameter of the flexible exhaust hose (Fig. 1).
- 8. In regards to claim 8, Davey discloses the apparatus of claim 6, as described above, and further wherein the flexible exhaust hose has an outer diameter of about 2 inches (Col. 7, Lines 47-49).
- 9. Claims 11-12, and 13-14 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Bishop et al. (U.S. Pat. No. 6,843,516). Bishop discloses a rigid tube having a first end connectable to an exhaust outlet of a combustion engine (Fig. 3, No.

Art Unit: 3748

11), the tube including an inner diameter (Modified Fig. 3, No. B), the inner diameter having at least two rings mounted thereto (Fig. 3, No. 16 and 18), each ring having an outer diameter the same as the inner diameter of the tube and an inner diameter smaller than the inner diameter of the pipe (Modified Fig. 3, No. B).



Modified Fig. 3

- 10. In regards to claim 12, Bishop discloses the apparatus of claim 11, as described above, and further wherein the tube is a rigid metal pipe (Fig. 3, No. 3; Abstract).
- 11. In regards to claim 13, Bishop discloses the apparatus of claim 11, as described above, and further wherein a second end of the tube is connectable to a flexible marine exhaust hose.
- 12. In regards to claim 14, Bishop discloses the apparatus of claim 11, as described above, and further wherein the tube includes a first ring mounted to the first end of the tube and a second ring mounted to a second end of the pipe (Fig. 3, No. 18 and 16).

Art Unit: 3748

Claim Rejections - 35 USC § 103

- 13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 14. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 15. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jörg Alexnat in view of Woon et al. (U.S. Pat. No. 6,408,625). Jörg Alexnat discloses the system of claim 1, but fails to specifically discuss the engine being within a "genset". Woon discloses operating techniques for internal combustion engines that teach the use of an internal combustion engines in a generator set "genset" (Col. 17, Lines 9-22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the "genset" as taught by Woon in the system of Jörg Alexnat for the advantage of providing generated electricity to the vehicle.
- 16. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jőrg Alexnat in view of Smullin et al. (U.S. Pat. No. 6,591,939). Jőrg Alexnat discloses the

Application/Control Number: 10/765,708

Art Unit: 3748

system of claim 1, but fails to specifically discuss the system being adapted for marine use. Smullin discloses a marine engine silencer system that shows the use of an internal combustion engine in a marine application. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the marine application as taught by Smullin with the system of Jörg Alexnat for the advantage of internal combustion powered propulsion and for generated electricity.

Page 7

- 17. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davey. Davey discloses the apparatus of claim 6, as described above, but does not expressly disclose the two or more rings being spaced about 4.5 inches apart from each other along a length of the flexible exhaust hose. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to space the two or more rings 4.5 inches apart because Applicant has not disclosed that the spacing provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with such spacing because the rings exist at the ends of the tube and a 4.5 inch tube could be required based on exhaust requirements. Therefore, it would have been an obvious matter of design choice to modify Davey to obtain the invention as specified in claim 7.
- 18. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davey in view of Smullin. Davey discloses the apparatus of claim 6, as described above, but fails to specifically discuss the flexible exhaust hose being adapted for marine conditions.

 Smullin discloses a marine engine silencer system that shows the use of exhaust

Art Unit: 3748

conduit in a marine application (Fig. 2, No. 135, 139, and 140). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the flexible exhaust coupler apparatus as taught by Davey in the system of Smullin for the advantage of coupling sections of exhaust pipe and reducing stresses caused by engine vibration.

- 19. Claim 10 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Davey. Davey discloses the apparatus of claim 6, as described above, but does not expressly disclose the length of the flexible exhaust hose being about 6 feet or less. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to make the length of the flexible exhaust hose about 6 feet because Applicant has not disclosed that the length of 6 feet provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with a flexible exhaust hose length of 6 feet because the distance required for exhaust to travel in exhaust applications is often near or 6 feet. Therefore, it would have been an obvious matter of design choice to modify Davey to obtain the invention as specified in claim 10.
- 20. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bishop. Bishop discloses the apparatus of claim 11, as described above, but fails to expressly disclose the tube and the rings being made of stainless steal. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to make the tube and rings out of stainless steel because

Art Unit: 3748

Applicant has not disclosed that the stainless steel material provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well being made of stainless steel because stainless steel is commonly used in internal combustion engine exhaust applications. Therefore, it would have been an obvious matter of design choice to modify Bishop to obtain the invention as specified in claim 15.

Allowable Subject Matter

21. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pribil (U.S. Pat. No. 1,530,324) discloses a flexible muffling tube.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Loren C. Edwards whose telephone number is (571) 272-2765. The examiner can normally be reached on M-TH 5:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3748

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Loren Edwards

THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700